

REMARKS

The first sentence of the application has been amended to correct a typographical error in the serial number of the provisional application.

The paragraphs on pages 4, 9 and 12-13 have been amended so as to correspond to the renumbered drawings wherein original Figure 6 was omitted.

Figures 7 and 8 have been renumbered Figures 6 and 7.

Attached hereto is a marked up version of the changes being made to the Specification. The attached page is captioned "Version with Markings to Show Changes Made." Also attached hereto are marked up versions of the Figures which have been changed as well as new clean copies of Figures 6 and 7.

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Respectfully submitted,



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Version with Markings to Show Changes Made

This application claims the benefit of Provisional Application Serial No. [06]60/170,888 filed December 14, 1999.

Figures [6, 7 and 8] 6 and 7 are graphical representations of "load v. displacement" response determined from a ram penetrating a glass laminate of this invention; such "load v. displacement" curve is useful for determining flexural modulus.

Figures 5A and 5B show a test frame 501 comprising a rectangular base 502 having a rectangular opening and supporting beams 503 which are covered with 3 mm thick rubber strips 504. A sheet of laminated glass 505 having overall dimensions of 45 x 60 cm (18 x 24 in) will rest on the support beams 503 with an 11 mm bite. Four angle-shaped holders 506 with a 3 mm thick rubber coating 507 overlap the top edge of the glass laminate with a 5-6 mm bite on all four edges of the glass laminate. Each holder 506 is secured to the frame by two C-clamps 508 (one of eight is shown) located at a distance from each corner equivalent to about one-fourth of the length of the side of the laminate. The frame is positioned below a 180 mm diameter hemispherical ram head 509 which is driven into the glass laminate at a speed of 125 mm/minute. The load and distance of ram travel from impact with the glass laminate is recorded to generate a "load v. displacement" response curve as illustrated in Figures [6, 7 and 8] 6 and 7. The ratio of load to ram displacement represents flexural modulus of the laminate.

Examples 1-15

Glass laminates about 45 x 60 cm (18 x 24 in) were constructed of the materials indicated in Table 1.

Table 1

<u>Laminate No.</u>	<u>Layer Assembly</u>
1	glass / PBV2 / glass
2	glass / PVB3 / glass

3	glass / PVB4 / glass
4	glass / PVB1 / PET2 / PVB1 / glass
5	glass / PVBS / PVB5 / glass
6	glass / PVB7 / PET2 / PVB7 / glass
7	glass / PVB6 / PET2 / PVB6 / glass
8	glass / PVB7 / PET1 / PVB7 / glass
9	glass / PVB2 / PET1 / PVB2 / glass
10	glass / PVB6 / PET1 / PVB6 / glass
11	glass / PVBS / PET2 / PVB5 / glass
12	glass / IONOMER / glass
13	glass / PVB2 / PET2 / PVB2 / glass
14	glass / PVBS / glass
15	glass / PVB1 / PVBS / PVB1 / glass

The laminates were evaluated for impact resistance by striking with a 9.5 kilogram hammer-head at the end of a 1400 mm pendulum arm from a drop height of 700 mm according to British Standard BS AU 209, Part 4a modified in that the glass laminate was mounted in a vertically oriented test frame of the type shown in Figure 5A; the hammer was set to strike at five points of a diamond pattern measuring 70 mm on a square side (in sequence, the top, left center, center, right center and bottom). After hammer impact the laminates were deformed in the range of 2.5 to 35 mm (0.1 to 1.4 inches) with cracked glass but intact interlayer. After pendulum impact testing the laminates were subjected to ram head penetration testing to measure flexural modulus. The "load v. resistance" curves for the laminates of examples [1] 6 to 15 are reported in Figures [6, 7 and 8] 6 and 7 as indicated by example number. The maximum flexural modulus for certain of the laminates is reported in Table 3.

Table 3

<u>Laminate No.</u>	<u>Maximum Flexural Modulus, N/cm</u>
1	166
2	218

3	253
4	662
5	615
6	956
7	730
8	687
9	589
10	626
11	1043
12	594
13	698
14	388
15	359

The preceding description is set forth for purposes of illustration only and is not to be taken in a limited sense. Various modifications and alterations will be readily apparent to persons skilled in the art. It is intended, therefore, that the foregoing be considered as exemplary only and that the scope of the invention be ascertained from the following claims.